

Iowa Department of Natural Resources

DRAFT Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 22.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. Bayer CropScience LP, located at 2500 Wiggins Road, Muscatine, IA 52761 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Silvia Malaman. The Department has granted Bayer CropScience LP request to issue three separate Title V permits for the facility. Please refer to the Plant Wide Conditions section of the permit for detailed descriptions of three permits.
2. Bayer CropScience LP is an agricultural chemical manufacturing facility. Potential emission for the 92-6908 portion of the facility are:

Pollutant	Abbreviation	Potential Emissions* (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	5.16
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	18.38
Particulate Matter	PM	18.38
Sulfur Dioxide	SO ₂	0.00
Nitrogen Oxides	NO _x	0.00
Volatile Organic Compounds	VOC	68.59
Carbon Monoxide	CO	0.00
Lead	Lead	0.00
Hazardous Air Pollutants ⁽¹⁾	Total HAP	50.63

⁽¹⁾Please refer to the Title V Application for a list of HAPs.

* Facility totals for 70-01-008 have not been included. Total potential emissions for the facility exceed major levels for PM₁₀, SO₂, NO_x, VOC, CO, and HAPs.

3. Bayer CropScience LP submitted a Title V Operating Permit renewal application on 12/14/2020. Additional information was submitted on 7/21/2021 for modified equipment. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 22.107.
4. DNR has complied with the procedures set forth in 567 IAC 22.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from 5/19/2022 through 6/18/2022. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period. During this time, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown below.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

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DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 20-35, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 20-35.
4. DNR is required to comply with 567 IAC Chapter 22 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

Title V Application Review Notes

Applicant:	Bayer CropScience LP
SIC Code:	2879
City:	Muscatine
County:	Muscatine
EIQ#:	92-6908
Facility#:	70-01-008
Permit #:	04-TV-006R3
Reviewer:	Derek Wedemeier
Date:	**DATE**

Facility Identification

Facility Name:	Bayer CropScience LP
Facility Location:	2500 Wiggins Road, Muscatine, IA 52761
Responsible Official:	Silvia Malaman
Phone:	563-263-0093

Background

Bayer CropScience has applied for three Title V permits for their Muscatine facility (EIQs 92-6908, 92-6909, 92-3670). The facility will be considered as a whole with regard to applicability of various air permitting programs. This permit is for 92-6908 and covers two process areas at the facility: the Liquid Formulations and the Flowable Formulations.

The Flowable Formulations are typically water-based liquid herbicide formulations consisting of herbicide technical ingredients and other herbicide additives. Both microencapsulated and non-microencapsulated formulations are produced.

The Liquid Formulations area formulates, packages, and ships herbicide products, herbicide technical active ingredients, and formulated herbicide premixes. The Liquid Formulations Facility packages and ships products in jugs, drums, shuttles, and mini-bulk containers. There are also facilities for providing bulk shipment of products in rail cars or tank trucks.

Title V Applicability

Pollutant	Major for Title V?
PM ₁₀	<input checked="" type="checkbox"/>
SO ₂	<input checked="" type="checkbox"/>
NO _x	<input checked="" type="checkbox"/>
VOC	<input checked="" type="checkbox"/>
CO	<input checked="" type="checkbox"/>
Lead	<input type="checkbox"/>
Individual HAP	<input checked="" type="checkbox"/>
Total HAPs	<input checked="" type="checkbox"/>

General Changes

- The facility name was updated from Monsanto Company – Muscatine to Bayer CropScience LP.
- The Responsible Official and Facility Contact were updated.
- Page numbers were updated.
- General Conditions were updated
- The Permit has been organized to group emission units with similar emission limits and operating requirement into tables following the facility's request
- An effort has been made to list the emission points in numerical order where possible following the facility's request.
- Several emission units were removed from the Insignificant Activities Equipment list following the facility review period.
- Multiple construction permits were updated after the Title V application was submitted. These changes have been incorporated into the Title V permit and PTE calculations.

Program Applicability for Bayer CropScience LP

- PSD 40 CFR 52: Yes (when a qualifying change is made).
- 40 CFR 60 NSPS: Yes
 - Several tanks at this facility were subject to Subpart Kb, the Volatile Organic Liquid Storage Vessel NSPS. Due to revisions to this Subpart effective October 15, 2003, these tanks are now considered to be exempt from Subpart Kb.
 - The continuous emissions monitoring equipment associated with Boiler #8 (EP 195) must comply with the requirements of Appendix B as required by DNR Construction Permit 82-A-092-P11. This emission unit is not included in this Title V Permit. All applicable requirements of this section are included in the Title V Permit for EIQ #92-6909.
- 40 CFR Part 61 NESHAP: Yes
 - The facility is subject to Subpart M, National Emission Standards for Asbestos (removal only). See General Conditions of Title V Permit.
 - Boiler #8 is subject to Subpart E, National Emission Standards for Mercury. This emission unit is not included in this Title V Permit. All applicable requirements of this subpart are included in the Title V Permit for EIQ #92-6909.
- 40 CFR Part 63 NESHAP: Yes
 - This facility is subject to Subpart MMM, the Pesticide Active Ingredient (PAI) MACT.
 - This facility is subject to Subpart FFFF, the Miscellaneous Organic Chemical Production and Processes NESHAP (MON).
 - There are units that are subject Subpart DDDDD, the Industrial, Commercial and Institutional Boilers and Process Heaters NESHAP.
- Major Source of HAPs: Yes
- Acid Rain: No
- Stratospheric Ozone Protection: Yes (air conditioning only)
- Prevention of Accidental Releases: Yes
- RCRA, 40 CFR 264 and 265:

- The RCRA (Resource Conservation and Recovery Act) program deals with solid waste disposal and hazardous waste management. Several of these RCRA requirements deal directly with air pollutant emissions. However, because these requirements are not mandated by the Clean Air Act, they are not required to be included in the Title V Permit.
- Federally Approved/Issued Requirements:
 - Prevention of Significant Deterioration (PSD) construction permits issued by EPA (EP 195 – Boiler #8, EPA PSD Permit dated 11/12/1982). This emission point is included in the Title V permit that was issued for EIQ #92-6909.
- Non-attainment:
 - 1-hour SO₂ nonattainment area: This facility is included in the control strategy for the current 1-hour SO₂ nonattainment SIP for Muscatine. The control measures consist of a lower SO₂ emission limit for Boiler #8 (EP195, permit number 82-A-092-P11) and a new SO₂ emission limit for the CAC Process Flare Burner (EP234, permit number 88-A-001-S3) and a new provision restricting fuel use to natural gas only on this flare. EPA approved those permits into the SIP on November 17, 2020 (85 FR 73218). The Department has since submitted a maintenance SIP to EPA (concurrent with a redesignation request) that includes an updated permit for Boiler #8 (permit number 82-A-092-P12) to reflect its voluntary refueling from coal to natural gas. EPA has not yet acted on that submission and the area remains designated nonattainment for the 2010 1-hour SO₂ NAAQS.
 - 24-hour SO₂ nonattainment area: In 1994 a portion of Muscatine County was designated by EPA as nonattainment area for the 24-hr SO₂ NAAQS. As part of the control strategy, permits for boilers 6 and 7 (permit numbers 76-A-265-S3 and 76-A-161-S3, respectively) were included with the 1996 and 1997 SO₂ nonattainment SIP submittals. Both of these permits have since been superseded and these boilers are currently restricted to operating on natural gas. The 24-hour nonattainment area, a subset of the current 1-hour nonattainment area, was re-designated to attainment on March 19, 1998 (63 FR 13343). Because the 24-hour SO₂ standard is revoked in an area one year after the effective date of the 1-hr SO₂ designation (see 40 CFR 50.4(e)), the 24-hour SO₂ standard no longer applies in the current 1-hr SO₂ nonattainment area. In the 1-hour SO₂ Maintenance SIP submitted to EPA November 17, 2021, the Department requested that EPA remove from the SIP the boiler 6 and 7 permits. EPA has not yet acted on this request

NESHAP Applicability for 92-6908

Equipment included in the Title V permit for 92-6908 is subject to 40 CFR 63 Subpart FFFF (MON). This portion of the facility is made up of multiple product storage tanks, raw material storage tanks, formulation tanks, and packaging operations. The Liquid Formulations and Flowable Formulations units are not currently subject to the PAI MACT (NESHAP Subpart MMM).

Storage tank EP 255 (construction permit 99-A-886-S2) is a Group 2 storage tank covered under NESHAP FFFF. However, this tank is of the source type affected by NESHAP Subpart MMM (PAI MACT), because the material metolachlor (facility product name: MON1400 processed in the Multipurpose Unit PUG within 92-3670) is covered under NESHAP Subpart MMM.

The primary product for the Multipurpose Unit, including storage tank EP-255, was determined to be MON13900, a non-pesticide active ingredient on July 16, 2010. Under §63.2535(l)(2), the facility is required to re-determine the primary product of the process unit group (PUG) at least once every 5 years. If it is determined that MON1400 becomes the primary product of Multipurpose Unit, then Bayer CropScience must comply with the PAI MACT requirements. The facility re-determined the primary product remains MON13900 in 2020.

Periodic Monitoring for 92-6908

Emission Point	Control Equipment	Construction Permit	CAM Applicability
EP 216	CE-14D-4	86-A-019-S7	PM, PM ₁₀ , PM _{2.5}
EP 339	CE-14-366	99-A-395-S2	PM, PM ₁₀ , PM _{2.5}

Construction Permits rescinded since last Title V Permit for 92-6908

Construction Permit	Rescission Date
01-A-559-S1	12/29/2020
99-A-883-S1	9/9/2020
96-A-1263	NA – EPs not included in Application
96-A-1264	
06-A-1025-S2	12/29/2020

Construction Permits issued since previous Title V Permit for 92-6908

Construction Permit	Date Issued
02-A-220-S1	5/6/2022
01-A-1352-S2	5/6/2022
01-A-1353-S2	5/6/2022
99-A-885-S3	5/6/2022
99-A-886-S3	5/6/2022
98-A-623-S2	5/6/2022
98-A-624-S2	5/6/2022
99-A-896-S1	5/6/2022
99-A-515-S1	5/6/2022
96-A-267-S5	5/6/2022
96-A-268-S5	5/6/2022
99-A-513-S1	5/6/2022
99-A-514-S1	5/6/2022
96-A-265-S4	5/6/2022
96-S-266-S4	5/6/2022
97-A-186-S7	2/9/2022
98-A-940-S6	2/9/2022
99-A-1077-S5	2/9/2022

99-A-1078-S5	2/9/2022
13-A-516-S2	11/2/2021
15-A-579-S1	11/2/2021
97-A-755-S3	11/2/2021
97-A-756-S3	11/2/2021
97-A-860-S1	11/2/2021
98-A-002-S3	11/2/2021
98-A-551-S1	11/2/2021
99-A-884-S2	11/2/2021
99-A-887-S2	11/2/2021
99-A-888-S2	11/2/2021
99-A-890-S3	11/2/2021
99-A-891-S2	11/2/2021
99-A-982-S2	11/2/2021
99-A-893-S2	11/2/2021
96-A-266-S3	12/16/2020
96-A-265-S3	12/16/2020
96-A-268-S4	12/16/2020

99-A-512-S1	12/15/2020
99-A-897-S3	12/14/2020
99-A-889-S3	12/14/2020
96-A-267-S4	12/14/2020
20-A-350	12/14/2020
86-A-019-S7	12/14/2020
20-A-349	12/14/2020

99-A-894-S3	9/10/2020
99-A-895-S2	9/10/2020
01-A-826-S1	2/10/2020
99-A-182-S2	2/10/2020
99-A-890-S2	2/10/2020
99-A-395-S2	7/26/2018
15-A-027-S2	3/23/2017